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No correction for parallax or refraction has been applied to those differences which are the *observed* differences.

On May 14, the comet was pretty bright, and had a point of greatest condensation, but no stellar nucleus; scarcely any tail, but the nebulosity seemed to extend a little towards the south-preceding quadrant at an angle of about 30° with the parallel of daily motion.

On May 17, the comet just visible to the naked eye when directed to its exact place.

HAVERHILL. (W. W. Boreham, Esq.)

	Haverhill Sid. T.			
	h m s		m s	′ ″
May 17	14 23 55·7	Comet precedes 2107 B.A.C.	3 56·6	
		South of 2107		12 6·14
20	14 18 42	Comet follows *a*	4 32·8	
		South of *a*		4 22·95

	Mag.	R.A.	Dec.
a	7	6h 34m 57s	+ 50° 29′ 23″ nearly.

Haverhill Observatory, latitude 52° 5′ 22″·8 North,
longitude 0h 1m 46s·4 East.

Apparent places of the stars in the path of Brorsen's Second Comet, computed from the zones of Argelander, Bessel, and Lalande, or observed by M. Rumker, Director of the Observatory of Hamburg.

Date.	Apparent R.A.	Apparent Dec.	Date.	Apparent R.A.	Apparent Dec.
1846.	h m s	° ′ ″	1846.	h m s	° ′ ″
May 2	21 38 42·77	32 4 31·5	May 9	1 42 25·77	68 25 10·0
	21 39 0·60	32 24 23·3		1 51 33·52	68 11 54·9
	21 40 9·07	32 4 16·2	12	4 34 48·07	66 15 9·2
	21 41 44·27	32 4 54·3		4 36 37·72	66 13 18·9
	21 43 51·15	31 56 25·1		4 38 17·32	65 43 58·4
	21 44 10·95	31 57 6·8		4 38 47·44	66 4 20·5
	21 44 13·78	31 56 19·6		4 39 9·67	66 10 11·4
3	21 45 38·47	38 13 57·0	13	5 8 47·28	65 58 4·8
	21 45 50·96	38 12 2·6		5 10 21·86	63 55 12·0
	21 46 24·37	38 6 48·8		5 11 31·31	63 55 6·2
	21 51 39·57	38 11 36·6		5 15 48·57	63 49 4·9
8	0 35 9·94	66 11 14·2			
	0 35 26·27	66 18 53·9	14	5 28 28·05	61 30 43·6
	0 45 2·56	66 31 45·1		5 30 0·16	61 23 26·2
	0 48 53·89	66 36 19·2		5 35 14·07	61 17 28·3

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Date.	Apparent R.A.	Apparent Dec.
1846.	h m s	° ′ ″
May 15	5 51 27·35	59 23 12·2
	5 53 55·38	58 54 45·5
	5 56 24·50	58 56 48·6
	5 57 16·17	59 11 4.6
18	6 24 47·41	53 35 28·6
	6 25 23·77	53 38 9·2
	6 28 37·26	53 31 41·8
19	6 23 8·32	52 5 15·0
	6 24 31·15	51 56 50·5
	6 27 47·17	52 6 25·4
	6 28 35·82	52 7 15·4
	6 30 49·18	51 47 52·0
	6 31 52·79	51 35 45·3
	6 34 4·93	51 58 39·9
	6 35 24·90	51 56 24·0
	6 41 20·06	51 41 42·5
	6 41 23·18	51 49 21·6
21	6 39 10·06	49 13 59·6
	6 43 2·45	49 5 12·8
	6 43 44·55	48 44 50·8
	6 48 0·57	48 49 25·2
22	6 45 47·68	47 28 6·4
	6 49 11·45	48 9 17·9
	6 52 17·54	47 28 18·1
	6 51 58·14	48 7 37·3
	6 53 37·40	47 59 35·6
23	6 45 9·44	46 27 40·3
	6 45 11·78	46 43 35·4
	6 45 31·65	46 53 50·5
24	6 52 23·26	45 45 46·5
	6 52 54·73	45 16 50·4
	6 55 56·43	45 37 22·8
	6 56 20·82	45 40 30·1
	6 59 10·26	46 1 51·8
	7 4 25·77	45 40 3·7
1846.	h m s	° ′ ″
May 26	6 57 1·70	44 16 14·8
	6 58 47·93	43 31 35·6
	7 0 52·56	43 30 11·3
	7 0 58·87	44 5 19·3
	7 1 26·36	44 14 6·3
28	6 54 16·09	42 6 15·9
	6 56 13·69	42 11 16·5
	6 57 8·54	41 52 22·5
	6 58 36·00	41 51 46·8
	7 5 6·16	42 11 42·4
30	6 53 15·05	40 47 49·0
	6 56 33·27	40 59 31·7
	6 57 12·70	41 0 49·5
	7 0 31·31	40 17 22·9
31	6 55 17·81	40 5 8·9
	7 0 6·97	40 17 11·1
	7 0 31·37	40 17 23·0
	7 1 34·93	40 11 19·0
	7 1 48·72	40 15 26·0
June 1	7 1 4·21	39 33 51·0
2	6 58 42·73	38 50 43·3
	6 59 8·78	38 42 34·2
	7 7 11·40	39 8 35·2
	7 8 23·08	38 56 31·6
3	7 0 41·95	38 26 8·9
	7 3 13·08	38 21 36·8
	6 59 44·66	38 22 5·8
4	6 53 51·33	37 46 53·4
	6 58 11·71	37 40 43·6
	6 58 26·17	37 46 3·8
	7 0 37·26	37 22 21·5
5	7 5 29·99	37 2 54·4
	7 9 3·78	36 56 52·9
	7 11 45·55	37 2 33·3
6	6 59 5·93	36 48 3·0

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The day is set down on which Mr. Rumker compared the Comet with the above stars, and to this date the *apparent* places are to be referred.

Brorsen's Second Comet.

Elements.

By M. d'Arrest, from the Königsberg observation of May 1, and the Berlin observations of May 4 and 9.

Time of Perihelion Passage, 1846, June 5·27696, Berlin Mean Time.

	°	′	″	
Perihelion	162	36	52·6	Mean Equinox, 1846.
Node	262	2	52·6	
Inclination	29	15	15·0	
Log. q	9·8033725			

Retrograde.

By M. Petersen, *approximate*, from the Königsberg observation of May 1, and the Altona observations of May 2 and 3.

Time of Perihelion Passage, 1846, June 5·28789, Berlin Mean Time.

	°	′	″	
Perihelion	162	34	2	Apparent Equinox, May 2.
Node	261	59	49	
Inclination	29	18	30	
Log. q	9·803094			

Retrograde.

There is some likeness with the comets of 1701, 1766, and in some respects with the comets of 1790, 1798.

According to these elements, the comet will pass its descending node July 19, and on July 18 will approach the earth very nearly, *i. e.* within about $\frac{1}{20}$ of the earth's distance from the sun; at this time, however, the earth will be in the diametrically opposite point of her orbit.

By M. Rumker, *approximate*:—

Perihelion Passage, 1846, June 5·224907, Greenwich Mean Time.

	°	′	″
Perihelion	162	42	57
Node	262	12	40
Inclination	29	6	59·7
Log. q	9·8037417		

Motion retrograde.

By W. W. Boreham, Esq. *approximate.*

Perihelion Passage, June 5·2484, Greenwich Mean Time.

	°	′	″	
Perihelion	162	37	13·7	Mean Equinox, May 1.
Node	262	11	21·4	
Inclination	29	13	35	
Log. q	9·8031918			

Motion retrograde.